

## GREENSEAL FLEXI 201

### FLEXIBLE CEMENTITIOUS WATERPROOF COATING

#### DESCRIPTION

Greenseal Flexi 201 is a flexible cementitious waterproofing that consists of two components. It consists of Portland cement, and selected well graded sand, formulated with specially selected and graded fine quartz and high quality latex to create brushable, smooth slurry with excellent bond and adhesion to most substrates. It is suitable to be applied to concrete and mortar to prevent water infiltration by filling and sealing pores and voids or hair line cracks in substrates. However, it provides a breathable coating which allows water vapour transmission.

#### ADVANTAGES

- Applied directly to the concrete by brush.
- Good elongation.
- Can be applied on damp surfaces.
- Excellent adhesion bonds to porous and non-porous surfaces.
- Non-toxic and is approved for potable water use.
- Non-corrosive to steel and iron.
- High resistance to carbon dioxide and chloride ion diffusion.

#### USES

Flexible cementitious waterproofer suitable for:

- Bathrooms
- Wet Kitchens
- Planter Boxes
- Water Tanks
- Sea Walls
- Toilet
- Swimming Pools
- Balconies
- Retaining Wall
- Fish Ponds
- Concrete Gutter / Roofs

#### PRODUCT PROPERTIES

Test	Test Results	Standard
Water Penetration	0 mm (no water penetration)	DIN 1048
Toxicity	Non toxic	BS 6920 : Part 1:2000 / SPAN
Compressive strength	10.8 N/mm <sup>2</sup>	ASTM C109-92
Adhesive strength	0.6 N/mm <sup>2</sup>	ASTM D4541
Tensile strength	1.5 N/mm <sup>2</sup>	ASTM D412
Flexural strength-28 days	8.2 N/mm <sup>2</sup>	BS 4551:1998
Abrasion resistance	1.52 g/h.m <sup>2</sup>	ASTM D4060-84
Water vapour transmission	1.02 g/h.m <sup>2</sup>	ASTM E96
Elongation at break	150%	ASTM D412
Crack Bridging	No Crack at 2mm	ASTM D836
Thickness of dry film	> 1 mm	Greenseal Laboratory

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### APPLICATION INSTRUCTIONS

#### SURFACE PREPARATION

Surface preparations are required before using Greenseal Flexi 201.

- Thoroughly clean concrete surfaces to ensure the surfaces are free from oil, grease, paint, loose dust, mud and laitance.
- Honeycombs should be hacked off to expose the concrete.
- All chipped or loose particles should be removed, the surface cleaned with water before repairing.
- Apply Injection Grout to areas that were hacked.
- Power float or steel trowel the surface to receive the waterproofing material.

#### Angle Fillet

- All junctions between the slabs and walls, do an angle fillet of 25mm X 25mm with Greenseal Injection Grout.
- Mix 3 parts of Greenseal Injection Grout / Greenseal 300 to 1 part water to mix thoroughly to a mortar consistency and apply with a trowel for form an angle fillet.

#### Outlet and Pipe Penetration

- Hack a V groove joint with a depth of 25mm surrounding the outlets and pipes.
- Wash thoroughly the hacked areas to expose the clean concrete surfaces between the outlet pipe and the concrete.
- Mix 3 parts of Greenseal Injection Grout / Greenseal 300 to 1 part water to mix thoroughly to a mortar consistency and apply with a trowel into the hacked V groove and level it to the concrete level.

#### MIXING

- Greenseal Flexi 201 is supplied in 2 components. To generate consistent slurry, pour the liquid component into a pail, and then add in the powder component gradually to the liquid. In the meantime, use a stirrer to stir the mixture until the mixture is free from lumps.
- No water or other material should be added in the powder component.

#### APPLICATION

- Apply Greenseal Flexi 201 with a stiff brush or spray onto the prepared surface approximately 1.0kg/m<sup>2</sup> per coat. Two coats are required.
- After the application of the 1<sup>st</sup> coat of Greenseal Flexi 201 allow it to dry.
- When the 1<sup>st</sup> coat is dry, the 2<sup>nd</sup> coat can be applied. The procedure of application for 2<sup>nd</sup> coat of Greenseal Flexi 201 is the same as the 1<sup>st</sup>

coat except that application should be applied counter cross wise to the 1<sup>st</sup> application coat.

- Application Interval of each coat should be atleast 1-2 hours apart. To avoid pin holes and to ensure a full coverage, apply each coat from a different direction.

#### Application with Greenseal Fiber Mesh

GS Fibre Mesh is a non-woven fibre mesh fabric used as reinforcement in the application of liquid waterproofing where substantial movement is anticipated. It is designed so as to allow liquid waterproofing to pass through, thereby forming a compact reinforced sandwich system upon application problem between the top and bottom layers should a high force be applied on it.

Application for using Greenseal Fiber Mesh is as follows:

- Where a layer of polyester fiber mesh is used as reinforcement, it shall be laid onto the 1<sup>st</sup> coat of Greenseal Flexi 201 before it is totally dry to enable it to adhere onto the 1<sup>st</sup> coat and leave to dry prior to the 2<sup>nd</sup> coat application.
- For better tensile strength use in conjunction with Greenseal Fiber Mesh.

#### COVERAGE

##### Apply by brushing method with Fiber Mesh (total thickness: 1.0 mm)

- |                |                        |
|----------------|------------------------|
| 1. First Coat  | : 1 kg/ m <sup>2</sup> |
| 2. Second Coat | : 1 kg/ m <sup>2</sup> |

##### Apply by brushing method without Fiber Mesh (total thickness: 1.2 mm)

- |                |                        |
|----------------|------------------------|
| 1. First Coat  | : 1 kg/ m <sup>2</sup> |
| 2. Fiber Mesh  |                        |
| 3. Second Coat | : 1 kg/ m <sup>2</sup> |

#### CURING

- Freshly applied Greenseal Flexi 201 should be protected from direct rain, dirt, oil, grease and other loose particle for at least 12 hours.
- It is foot trafficable after 24 hours and resistant to light mechanical stress after 3 days. Permanent water pressure resistance shall be achieved after a full hardening of 7 days.

#### CLEANING EQUIPMENT

Clean tools and equipments immediately with clean water before the waterproofing material sets in. Hardened material can only be removed mechanically.

## GREENSEAL FLEXI 201

### STORAGE AND SHELF LIFE

Greenseal Flexi 201 has a shelf life of 12 months. Store the material in a cool dry place.

### POT LIFE

After mixing of Greenseal Flexi 201, it has to be used within 1-2 hours time.

### PACKAGING AND APPEARANCE

Greenseal Flexi 201 is packed in:

33 kg per set:

- Part A (Powder) – 23 kg
- Part B (Liquid Polymer) – 10 kg

Colour – Grey (Powder: cement grey and polymer: milky white)

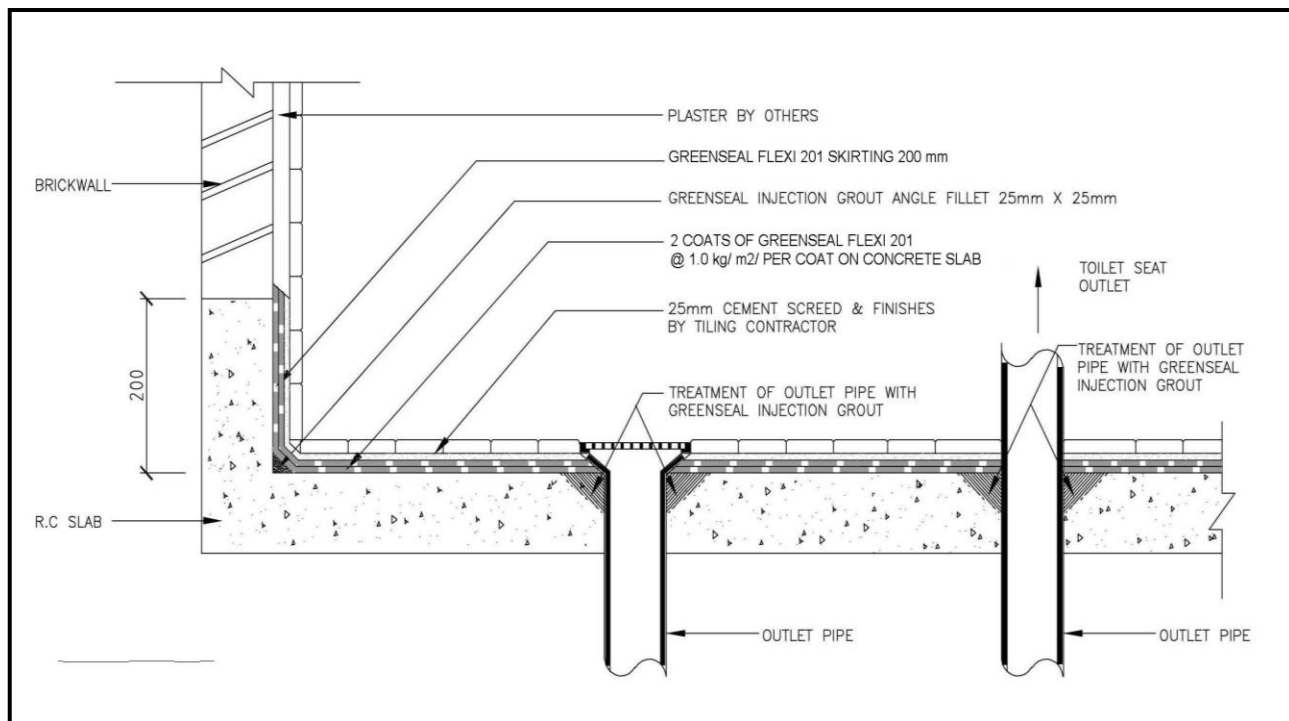
### PRECAUTIONS

- Plastering & Tiles – After the application of Greenseal 201, apply a thin layer of cement slurry on top of it 201 surface before plastering or Tiling work is done.

### HEALTH, SAFETY AND CLEANING

Greenseal Flexi 201 contains cements which may cause skin irritation. For precaution, protective gloves and goggles are recommended to be worn when handling of this product. Always allow air to ventilate in the basement or in an enclosed area. If ingested, do not induce vomiting but seek medical attention. In case of eye contact, rinse thoroughly with abundant water. If case of skin contact, wash affected areas with soap and water. Change to clean clothes and shoes. Wash contaminated clothes/shoes thoroughly before reuse.

### TECHNICAL DRAWING USING GREENSEAL FLEXI 201 WATERPROOFING SYSTEM



### Guarantee

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. GREENSEAL reserves the right to introduce changes without prior notice. Any use of this data beyond the purposes expressly specified in the leaflet will not be the Company's responsibility unless authorized by us. Our guarantee covers exclusively the quality of the manufactured product. We will not accept any responsibility exceeding the value of the purchased product.

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Greenseal is certified by MS ISO 9001:2008 Quality Management System